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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,243

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Vincent Barriac

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09/11/2009

COHEN, PONTANI, LIEBERMAN & PAVANE LLP  
551 FIFTH AVENUE  
SUITE 1210  
NEW YORK, NY 10176

EXAMINER

BORSETTI, GREG

ART UNIT

PAPER NUMBER

2626

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,243	<b>Applicant(s)</b> BARRIAC ET AL.	
	<b>Examiner</b> GREG A. BORSETTI	<b>Art Unit</b> 2626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 is/are allowed.
- 6) ☒ Claim(s) 19-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/12/2009</u> .   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. Claims 1-23 are pending.
2. Claims 1, 14, 19, and 20 have been amended.
3. The objections to claims 1, 14, 19, and 20 have been withdrawn in view of the amendments submitted 6/12/2009.
4. The objections to the specification have been withdrawn in view of the amendments submitted 6/12/2009.
5. The 35 USC 101 rejections for claims 1-13 have been withdrawn in view of the amendments submitted 6/12/2009. The method claims are now tied to a receiver terminal.
6. The 35 USC 101 rejections for claims 14-18 have been withdrawn in view of the amendments submitted 6/12/2009. The amendment adds operability in a receiver terminal, therefore the claim cannot be directed to an entirely software embodiment.
7. The 35 USC 101 rejections for claims 19-23 are maintained. It is understood by the Examiner that a description in the specification does not preclude patentability through another embodiment. However, the medium, in its broadest reasonable interpretation, can be interpreted as including transmission media which is non-statutory. The Examiner suggests using "storage medium" in the claim language because it is well defined in the specification (11/14/2008, Page 25) to not include transmission media. Applicant may delete any reference to transmission media from the specification.

***Response to Arguments***

8. Applicant argues "Galetto therefore expressly teaches away from measuring delay in the terminating handsets, or the receiver terminals. Rather, the delay is measured in the network itself, i.e., in a network element." (Remarks, page 17, ¶ 1) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., ...*at the receiver terminal...*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Applicant further argues "Applicants, however, contend that no combination of Galetto, Psytechnics, Kirla and/or Schaffer achieves the subject matter of independent claim 1, from which claims 2, 3, 9 and 13 depend. There is simply nothing in Psytechnics, Kirla and/or Schaffer to cure the above-discussed deficiencies in Kirla, e.g., the lack of teachings relating to applicants' claimed telephony module and/or the signals from which the first and second speech signals are reconstituted, as recited in now-amended independent claim 1." (Remarks, Page 18, ¶ 4) Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

***Information Disclosure Statement***

10. The Information Disclosure Statement (IDS) submitted on 6/12/2009 is in

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compliance with the provisions of 37 CFR 1.97.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 19-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As was stated in the previous actions, the computer-readable information medium (as defined by the newly provided specification, Page 25, ¶1) includes transmissible media, which does not fall within one of the four enumerated statutory categories of invention under 35 USC 101. Therefore, claims 19 and 20 are still non-statutory because they are embodied on non-statutory elements.

Appropriate correction is required.

***Allowable Subject Matter***

12. Claim 1-18 are considered allowable subject matter.

The following is a statement of reasons for the indication of allowable subject matter:

As per claim 1, the closest known prior art fails to teach or fairly suggest, alone or in reasonable combination,

A method for evaluating a processing delay of a speech signal contained in data packets received in a receiver terminal during a voice call to a terminal sending said data packets over a packet-switched network, the receiver terminal having a telephony module which generates a reconstituted speech signal from the received data packets, said method comprising the steps of:

obtaining, at the receiver terminal, a stream of audio packets from the received data packets and decoding the audio packet stream within a predetermined decoding time to reconstitute a first speech signal from the received packets of the audio stream;

duplicating, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module to constitute a second speech signal;

determining, at the receiver terminal, a time difference between the first speech signal and the second speech signal; and

calculating, at the receiver terminal, the processing delay of the speech signal contained in the data packets received in the receiver terminal from at least the determined time difference between said first and second speech signals and said predetermined decoding time.

Galetto et al. teaches the determination of speech latency across a communication network element having an input interface and an output interface includes allocating a timestamp to the data packets of a sample of data packets representing a speech signal at the two interfaces, recording the timestamps together with the corresponding data packets, decoding the recorded data packets at both

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interfaces to generate respective envelopes in the time domain, cross-correlating the envelopes to determine correlating areas of the envelopes, and determining a value for the speech latency between the interfaces from the timestamps associated with correlating areas of the envelopes. (Abstract) Galetto, however, fails to teach the limitation of duplicating, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module to constitute a second speech signal. Galetto, therefore, also fails to teach the subsequent limitations involving the calculation of the processing delay of the speech signal because the first and second speech signals are not both generated at the receiver terminal.

Psytechnics teaches a determination of end-to-end delay based on the additional information about the delay estimate from RTCP packets, coding and packetization delay, jitter delay, and access delay from both the send and receive side. (Pages 2-3) Psytechnics, however, fails to teach the limitation of duplicating, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module to constitute a second speech signal. Psytechnics, therefore, also fails to teach the subsequent limitations involving the calculation of the processing delay of the speech signal because the first and second speech signals are not both generated at the receiver terminal.

Kirla teaches the calculation of the transmission delay of a packet-switched network by using a Ping technique. (col. 8, lines 36-40) Kirla, however, fails to teach the limitation of duplicating, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module to constitute a second speech signal. Kirla,

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therefore, also fails to teach the subsequent limitations involving the calculation of the processing delay of the speech signal because the first and second speech signals are not both generated at the receiver terminal.

Schaffer teaches sending end-to-end delay information over a packet-switched network to a collection server configured to manage end-to-end delay information sent by a plurality of communication terminals connected to a network. (col. 2, lines 32-35) Schaffer, however, fails to teach the limitation of duplicating, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module to constitute a second speech signal. Schaffer, therefore, also fails to teach the subsequent limitations involving the calculation of the processing delay of the speech signal because the first and second speech signals are not both generated at the receiver terminal.

Claims 2-13 are also considered allowable for depending on, and further limiting, allowable claim 1.

As per claim 14, the closest known prior art fails to teach or fairly suggest, alone or in reasonable combination,

A device for evaluating a processing delay of a speech signal contained in data packets received in a receiver terminal during a voice call to a terminal sending said data packets over a packet-switched network, the receiver terminal having a telephony module which generates a reconstituted speech signal from the received data packets,



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said device comprising:

a network filter module configured to obtain, at the receiver terminal, a stream of audio packets from the received data packets;

a control decoder module having a predetermined decoding time for decoding the stream of audio packets obtained and for reconstituting a first speech signal from the received packets of the audio stream;

an audio filter module configured to duplicate, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module, the duplicated portion of the speech signal constituting a second speech signal;

means for determining, at the receiver terminal, a time difference between the first speech signal and the second speech signal; and

means for calculating, at the receiver terminal, the processing delay of the speech signal contained in data packets received in the receiver terminal from at least the determined time difference between said first and second speech signals and the predetermined decoding time.

Galetto et al. teaches the determination of speech latency across a communication network element having an input interface and an output interface includes allocating a timestamp to the data packets of a sample of data packets representing a speech signal at the two interfaces, recording the timestamps together with the corresponding data packets, decoding the recorded data packets at both interfaces to generate respective envelopes in the time domain, cross-correlating the

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envelopes to determine correlating areas of the envelopes, and determining a value for the speech latency between the interfaces from the timestamps associated with correlating areas of the envelopes. (Abstract) Galetto, however, an audio filter module configured to duplicate, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module, the duplicated portion of the speech signal constituting a second speech signal. Galetto, therefore, also fails to teach the subsequent limitations involving the calculation of the processing delay of the speech signal because the first and second speech signals are not both generated at the receiver terminal.

Psytechnics teaches a determination of end-to-end delay based on the additional information about the delay estimate from RTCP packets, coding and packetization delay, jitter delay, and access delay from both the send and receive side. (Pages 2-3) Psytechnics, however, an audio filter module configured to duplicate, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module, the duplicated portion of the speech signal constituting a second speech signal. Psytechnics, therefore, also fails to teach the subsequent limitations involving the calculation of the processing delay of the speech signal because the first and second speech signals are not both generated at the receiver terminal.

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Schaffer teaches sending end-to-end delay information over a packet-switched network to a collection server configured to manage end-to-end delay information sent by a plurality of communication terminals connected to a network. (col. 2, lines 32-35) Schaffer, however, an audio filter module configured to duplicate, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module, the duplicated portion of the speech signal constituting a second speech signal. Schaffer, therefore, also fails to teach the subsequent limitations involving the calculation of the processing delay of the speech signal because the first and second speech signals are not both generated at the receiver terminal.

Claims 15-18 are also considered allowable for depending on, and further limiting, allowable claim 14.

Claims 19-23 would be considered allowable if the 101 rejections above are overcome.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG A. BORSETTI whose telephone number is (571)270-3885. The examiner can normally be reached on Monday - Thursday (8am - 5pm Eastern Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg A. Borsetti/  
Examiner, Art Unit 2626

/Talivaldis Ivars Smits/  
Primary Examiner, Art Unit 2626

9/3/2009